

City of Los Angeles
Department of Public Works • Bureau of Sanitation



Save the Planet in Your Own Backyard!

Solid Resources Citywide Recycling Division

Reduce, Reuse, Recycle, and Buy Recycled





Composting is nature's way of recycling. It's an easy way to transform your yard trimmings, fruit scraps, and vegetable peels into a humus-rich, sweetsmelling soil conditioner.

#### HOME-MADE COMPOST

- Helps your garden by improving the texture, fertility and water holding capacity of your soil. Healthy soil grows healthy plants.
- Helps you save money by replacing store-bought soil conditioners with a natural, home-made product.
- Helps the environment by recycling valuable organic resources.
- Helps the City save money by lowering curbside collection costs.



# WHAT CAN YOU COMPOST?

A healthy pile needs a variety of ingredients that can contain carbon (brown materials) and nitrogen (green materials). A well balanced diet will create a friendly environment for nature's tiny composters (worms, bacteria, fungi, etc.)

It is easy to create a healthy pile when you follow the dos and don'ts listed below:

## DO COMPOST:

# **GREENS**

Vegetable trimmings
Coffee grounds
Fruit peels
Egg shells
Tea bags
Yard clippings
Livestock manure
Fresh hay

#### **BROWNS**

Chopped cornstalks
Shredded paper
Paper towels
Shredded cardboard
Dried leaves
Wood chips
Sawdust
Straw



# DON'T COMPOST:

Meat
Fatty foods
Bones
Dog or cat feces
Diseased plants
Treated wood



# CHOOSE A LOCATION

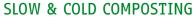
Composting can be done indoors or outdoors. Worm composting is best done indoors, and backyard composting is best done outdoors.

# The "How-To's" of Backyard Composting



## CHOOSE A METHOD

There are different ways to set up a composting pile. Use the description below to choose a method for outdoor composting that best fits your lifestyle.



This method requires little to no mixing and can be done in a pile or a bin. Start by mixing together equal amounts of green and brown materials and placing the mixture in a pile or bin. Add new ingredients as they become available. The compost will be ready in about 3 to 4 months.

or

# FAST & HOT COMPOSTING

The ideal size of a hot compost pile is 1 cubic yard (3 feet x 3 feet x 3 feet). Equal amounts of green and brown materials are mixed together and placed in a pile or bin. Turn the pile and add water about once a week to provide good air circulation and moisture. The pile will get hot (up to 120°F) which will speed up the composting process. Compost may be ready in 4 to 6 weeks. Do not add new materials to the pile. Save them for your next compost pile.





# BACKYARD COMPOSTING: Helpful Hints

Whichever method you choose, you'll always get better results if you:

Choose a composting location that gets equal amount of sunlight and shade during the day. This keeps the compost from drying out too fast.

Chop or shred your ingredients before putting them in the pile. Smaller pieces help speed up the decomposition process. A shovel, shredder, or lawnmower are useful choppers for your yard clippings

Try to mix equal parts of greens and browns into your pile, and mix as many different types of greens and browns as possible. Nature likes a balanced variety.

Add water when you build your pile, and maintain the moisture level as damp as a wrung-out sponge.











Choose a bin or pile style based on your ingredients, pile location, cost and compost method.



# **OPEN PILE**

Simply mix the materials together, and keep them in a dense heap, no smaller than 1 cubic yard. If you have problems keeping the pile moist, try covering it partway with a tarp. An open pile is not recommended if your ingredients include kitchen scraps.

#### **BINS**

You can make the bin yourself or purchase one.



# Homemade Bin

Convert an old plastic trash can into a composter by drilling about four rows of holes 4 to 6 inches apart all around the sides and cutting off the base for drainage;



Make a wire mesh bin by using 12 feet by 3 feet galvanized chicken wire or hardware cloth;



#### or

Build a wooden bin from 4 used wood pallets.

# Store Bought

These bins are available at most garden centers and home improvement stores. Store bought bins differ in price, ease of mixing, size, shape, etc. Call 1-800-773-CITY to learn more about the City of Los Angeles' Discounted Compost Bin Sales Events.

# BACKYARD COMPOSTING: Using Your Compost

Your compost is ready when it is dark brown in color and feels crumbly, like soil. It will no longer heat up and has a pleasant earthy aroma. Before using your compost, break up any large clumps, and put any materials that are not fully composted into your new compost pile.

Here are some easy ways to use it:

#### AS MULCH

Spread a layer of compost 1-3 inches thick around plants and over bare soil to prevent soil erosion, conserve water and control weed growth.



Mix about 6 inches of compost into the soild each time you start a new flower or vegetable garden or plant new trees or shrubs.

#### AS POTTING MIX

Sift the compost through a 1/4 inch screen for use as a planting mix. For indoor potted plants, mix together 2 parts of compost, 1 part sand and 1 part vermiculite.







# BACKYARD COMPOSTING: Troubleshooting

SYMPTOMS	CAUSES	SOLUTIONS
Pile not composting	Too dry	Moisten, until slightly damp
	Too much woody material	Turn the pile and add fresh green material
Pile smells rotten – attracts flies	Too wet	Turn the pile and add dry material
	Non-compostables present	Remove meat, fatty foods, etc. and turn the pile
	Too much green material	Turn the pile and add dry woody material
Rodents in pile	Food wastes in open bin, holes too large	Turn compost and rodent-proof your bin

# The "How-To's" of Worm Composting

Kids love worm composting. It's an easy and fun way to compost kitchen scraps (remember, no meat or fatty foods). You'll get small amounts of excellent fertilizer from your bin.

# CREATING A WORM HOME

You will need a plastic or wood container with a snug fitting lid and holes in the bottom for drainage. A large box (1 foot deep x 2 feet long x 3 feet wide) can handle about six pounds of food scraps per week. A small box (8 inches deep x 2 feet long x 2 feet wide) can handle about three pounds of food scraps per week. Place the box where it will not freeze or overheat — in a kitchen corner, garage or patio.

Complete your worm home by filling your box about 3/4 full with bedding material. Worms like to be cool and moist, so make your bedding material our of a mixture of shredded black and white newspaper, leaves, moist straw and a bit of soil.



# Adopting & Feeding Your Worms



# FINDING THE RIGHT WORMS

The best worms to use are "red worms," sometimes called "African Reds," "Red Wigglers" or "Manure Worms." You can purchase them at a bait shop or find them in an old compost pile. The common brown garden worm cannot survive in temperatures above 50°F, so don't put them in your worm bin.

Start with 1/2 to 1 pound or two big handfuls of worms. They will eat their weight in food each day and double their numbers every 30 to 45 days. Place your red worms on top of the bedding, and they will burrow down into it.

# THE FIRST MEAL

Red worms love kitchen scraps, like fruit and vegetable peels, eggshells, tea leaves and coffee grounds. Worms do not like dairy products or oily and woody foods.

Gently mix about one quart (1 pound) of kitchen scraps into the worm bedding. Cover and leave the worms alone for a couple of weeks while they get used to their new home.





# MAINTAINING A GOOD HOME AND HAPPY WORMS

Maintain a 4 to 6 inch layer of fresh bedding in your bin by adding some fresh bedding every 1 to 3 months. Make sure the bedding is moist, like a wrung-out sponge. Plastic bins may need extra bedding to absorb excess moisture. Wooden bins may need extra water to maintain moisture.

Observe the amount of food being eaten by the worms, and adjust the amount as needed. They will probably need to be fed about one quart (one pound) of food scraps per square food of bin area every week.

Be sure to bury the food to avoid fruit flies and odors. Bury the food in a different corner of the box at each feeding. The next time you look, the food should be gone. If not, try feeding your worms a little less for a while.

# **Harvesting Worm Compost**



# **HARVESTING**

The finished compost material will settle to the bottom as the worms turn the food scraps into a rich natural fertilizer (worm castings). When the original bedding has been transformed into compost, it's harvest time. Stop feeding your worms. In a few days, you can either:

Move the worms and castings to one side of the box, and add fresh bedding to the empty side. Place food on top and cover with some fresh bedding to prevent fruit flies. Within a few weeks, the worms will move over to the new bedding and food. At that point, you can harvest the castings from the worm-free side. Replace the empty space with fresh bedding and new food.





Separate the worms from the compost by hand, and start anew with fresh bedding and food.

# Using Worm Castings

Worm castings are richer in nutrients than yard trimmings compost and should be used more sparingly. Worm castings are rich in bacteria, calcium, iron, magnesium, sulphur and 60 other trace minerals. They are best used as part of a planting mix or a slow release fertilizer. Here are some simple applications:

#### GERMINATING SEEDS

When germinating seeds, place some castings in the bottom part of soil.



# TRANSPLANTING SEEDLINGS

At transplanting time, put a small handfull of castings into each hole as you plant.



## POTTING PLANTS

Mix a small amount of castings into your potting soil. The worm castings should be no more than one-fifth of all the ingredients in your potting mix.



# WORM COMPOSTING: Troubleshooting

SYMPTOMS	CAUSES	SOLUTIONS
Worm bin smells bad	Too much food	Feed less
	Too wet	Check drainage holes and add dry bedding
Fruit flies	Food is not buried	Bury food
		Cover surface of bedding with sheets of newspaper
Worms aren't eating	Too much food	Feed less
	Too acidic	Stop feeding citrus peels
		Sprinkle crused oyster shells



#### Let It Rot!

1975, Stu Campbell Storey Publishing, Pownal, VT 152 pp.

# Rodale Guide to Composting

1979, Organic Gardening Staff Rodale Press, Emmaus, PA 405 pp.

#### **Backyard Composting**

1992, Harmonious Technologies Harmonious Press, Ojai, CA 96 pp.

#### Worms Eat My Garbage

1982, Mary Appelhof Flower Press, Kalamazoo, MI 100 pp.

## **WEBSITES**

County of Los Angeles: Smart Gardening www.smartgardening.com

California Integrated Waste Management Board: Organics Outlook <a href="https://www.ciwmb.ca.gov/Organics/">www.ciwmb.ca.gov/Organics/</a>

Master Composter Site for Home Composting <u>www.mastercomposter.com</u>

Gardening For Kids <a href="https://www.geocities.com/EnchantedForest/Glade/3313/">www.geocities.com/EnchantedForest/Glade/3313/</a>

Worm Composting www.yucky.com/worm

Garden Web: The Internet's Gardening Community www.gardenweb.com



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